

DOCUMENT RESUME

ED 248 273

TM 840 579

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TITLE Follow-Up Study of the High School Class of 1981 One Year after Graduation.
INSTITUTION Montgomery County Public Schools, Rockville, Md.
PUB DATE Jun 83
NOTE 46p.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Counselor Evaluation; Course Evaluation; Employment Patterns; Followup Studies; Graduate Surveys; *High School Graduates; High Schools; Postsecondary Education; School Districts; Student Attitudes; Study Skills

IDENTIFIERS *Montgomery County Public Schools MD

ABSTRACT

The Montgomery County Public Schools (MCPS) survey of its high school graduating classes gathers information about (1) the postsecondary institutions they plan to attend and the kinds of jobs they hope to hold; (2) students' perceptions of the quality of the courses taken in high school and of their preparation in academic skill areas; and (3) students' perceptions of the effectiveness of counseling services. In the spring of 1982, surveys were mailed to all of the 8,678 June 1981 MCPS graduates. Surveys were returned by 2,627 of the graduates, and results indicated that the vast majority of graduates continued their education in postsecondary institutions, with 75 percent attending four-year colleges and universities. Those not attending school in 1981-82 were generally employed in business/office jobs, sales, or food/restaurant jobs. With the exception of foreign languages and mathematics, MCPS courses were rated as "good" or "very good" by over 80 percent of the students responding; and on the average, courses were given a "good" rating. Students felt less well prepared in the academic skill areas (writing papers, taking notes in class, using the library, completing homework, studying for tests, and managing time) than in the content areas. The counselors received mixed ratings from the students.
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**MONTGOMERY COUNTY
PUBLIC SCHOOLS
ROCKVILLE, MARYLAND**

**Follow-up Study of the
High School Class of 1981
One Year After Graduation**

June 1983

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Prepared by the Department of Educational Accountability

TM 840 579

MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

FOLLOW-UP STUDY OF THE HIGH SCHOOL CLASS OF 1981
ONE YEAR AFTER GRADUATION

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EXECUTIVE SUMMARY

FOLLOW-UP STUDY OF THE HIGH SCHOOL CLASS OF 1981 ONE YEAR AFTER GRADUATION

Since 1963, the Montgomery County Public Schools (MCPS) has conducted annual surveys of its high school graduating classes. These surveys gathered information primarily about the postsecondary institutions that graduates planned to attend and the kinds of jobs they hoped to hold. Graduates were queried at two points in time: the spring of their senior year and the following fall.

In response to questions raised by both school staff and community members regarding how well MCPS is succeeding in educating its students and what happens to students as they progress in their education and careers, the survey activity was expanded substantially on a pilot basis in the 1981-82 school year. Additional areas included covered:

- o Postsecondary education and employment activities during the first year after graduation
- o Students' perceptions of the quality of the courses taken in high school and of their preparation in academic skill areas (note taking, writing papers, managing time, etc.); and, for those who took vocational courses, their perceptions of the quality of those courses
- o Students' perceptions of the effectiveness of counseling services and the services of other high school staff, especially in such areas as preparing for future education or jobs, choosing among options for college or vocational school, and identifying sources of financial aid for further education

Plans have been made for gathering these data at graduation and one, three, and five years following graduation.

The present report, the follow-up survey of the graduates of the class of 1981, provides the first summary of data collected as part of this expanded effort. It offers information on both the perceptions and postgraduate experiences of the class of 1981 one year after graduation.

THE RESPONDENT SAMPLE

Surveys were mailed to all of the 8,678 June 1981 MCPS graduates in the spring of 1982, about nine months after they graduated. After two mailings, 2,627 surveys (30 percent of the initial sample) were returned. This response rate, while comparable to and even higher than that of other graduate surveys, is lower than desirable. As the survey activity is repeated in future years, it will be critical to explore ways of increasing the respondent rate and obtaining a fuller picture of the opinions of MCPS graduates.

Respondents were grouped by race, sex, and achievement level to determine the extent to which the respondent sample reflected the composition of the

students in the class of 1981.¹ Analyses indicate that responses were received from all race, sex, and achievement groups in the regular high school program and all high schools were represented. However, low-achieving males were slightly underrepresented and white middle- and high-achieving² females and high-achieving males were overrepresented in the respondent sample.

Further, students with the highest achievement level responded most frequently (45 percent of the sample compared with 31 percent of the population), while those with low or no test scores responded least frequently (30 percent of the sample compared with 47 percent of the population). While these disproportions are not unexpected and are often found in surveys of this kind, they nonetheless place certain limitations on the generalizations which can be drawn and must be kept in mind in interpreting the findings.

FINDINGS

POSTGRADUATE EDUCATIONAL AND EMPLOYMENT EXPERIENCES

The data show that the vast majority (88 percent) of graduates continued their education in postsecondary institutions, with 75 percent attending four-year colleges and universities. The postsecondary institutions most frequently attended were the University of Maryland (College Park) and Montgomery College (Exhibit E-1).

Significant differences in postsecondary school attendance were found when the data were examined by race and sex. Black males and females and Hispanic females were less likely to continue in school after graduation than were students from the other race and sex groups. Nonetheless, well over 70 percent of these students reported that they were continuing their education.

Differences were also found when patterns of postgraduate attendance were examined by individual senior high school. The responses indicated that the percentage of students continuing their education ranged from a low of 76 percent at Wheaton to a high of 97 percent at Springbrook (Exhibit E-2). Since these figures are considerably higher than those reported in past follow-up studies, it may be that many of those who chose not to respond to the survey were those who did not go on in school.

Those not attending school in 1981-82 were generally working, employed in business/office jobs, sales, or food/restaurant jobs. Half of this group of students planned, however, on attending school in 1982-83, and only 6 percent of the respondents had no plans for further postsecondary education.

1. Four achievement groups were formed: High (66-99 Normal Curve Equivalent (NCE) on the California Achievement Test, composite score in the 11th grade); average (49-65 NCE); low (1-48 NCE); and those with no tests scores, a group which may consist predominantly of special students enrolled in regular high schools.

2. In future years, additional follow-up activities will be undertaken where preliminary analyses indicate that some group of students is not adequately represented. This was not done for the present study because of its pilot nature.

EXHIBIT E-1

Schools Most Frequently Attended by Graduates of the Class of 1981

School Name	No.	%
1. University of Maryland (College Park, Baltimore, Eastern Shore, Frostberg, Salisbury, Towson)	502	24.2
2. Montgomery College (Rockville, Takoma Park, Germantown)	409	19.7
3. Duke	38	1.8
4. James Madison	31	1.5
5. VPI	26	1.3
6. University of Michigan	24	1.2
Shepherd	24	1.2
7. University of Delaware	22	1.1
8. Penn State	20	1.0
Syracuse	20	1.0
Catholic University	20	1.0
George Washington	20	1.0
9. Boston University	16	0.8
Georgetown	16	0.8
University of Virginia	16	0.8
10. University of Pennsylvania	15	0.7
Western Maryland	15	0.7
Cornell	14	0.7
Loyola	14	0.7
St. Mary's College	14	0.7

EXHIBIT E-2

Percentage of Students Attending Postsecondary School
In 1981-82 by High School

High School	Percentage* of Respondents by School
<u>Area 1</u>	
Montgomery Blair	86
Albert Einstein	87
J. F. Kennedy	90
Northwood	92
Paint Branch	84
Sherwood	82
Springbrook	97
Wheaton	76
<u>Area 2</u>	
Bethesda-Chevy Chase	95
Churchill	94
Walter Johnson	92
Richard Montgomery	84
Peary	86
Rockville	84
Walt Whitman	94
Woodward	93
<u>Area 3</u>	
Damascus	78
Gaithersburg	78
Magruder	89
Poolesville	77
Seneca Valley	83
Wootton	96
Total	88

*Percentages computed by dividing number of students by total number in that school who returned their surveys.

STUDENTS' RATINGS OF COURSES OFFERED IN HIGH SCHOOL

Students were asked to rate the quality of instruction provided in academic and vocational courses and other electives using a 1 to 4 scale, with 1 being "very poor" and 4 being "very good." They were instructed to provide ratings only for academic and other elective courses in which they had taken at least two semesters of instruction and only for vocational courses in which they had taken four semesters of instruction. Two scores were computed: average rating and percentage of students giving a "good" or "very good" rating (a 3 or 4).

Overall, the responses show that with the exception of foreign languages and mathematics, courses were rated as "good" or "very good" by over 80 percent of the students responding; and on the average, courses were given a "good" rating (Exhibits E-3, E-4, and E-5). In addition, foreign languages received a "good" or "very good" rating from 68 percent of the respondents; the comparable figure for mathematics was 76 percent. Examination of these ratings by race and sex revealed some significant differences, but these were not cross cutting and appeared rather to vary as a function of the particular department being assessed.

Further, despite the overall favorable ratings, it was clear that at least some students saw room for improvement in the major subject areas. The area mentioned as most in need of improvement was English, cited by 22 percent of the respondents. Mathematics was cited next most frequently, with 15 percent of the students indicating that it was in need of improvement.

RATINGS OF PREPARATION IN STUDY AND TIME MANAGEMENT SKILLS

Students were asked to rate how well prepared they were in study and time management skills. Specifically, they were asked to rate their preparation in:

- o Writing papers
- o Taking notes in class
- o Using the library
- o Completing reading assignments and homework
- o Studying for tests
- o Managing time

The data show that the respondents generally felt less well prepared in these skill areas than in the content subjects (Exhibit E-6). Further, perceived preparedness varied considerably among skill areas. Students felt the best prepared for completing reading assignments and homework and using the library, with approximately 70 percent of the respondents indicating that they were well or very well prepared in the area. The lowest ratings were given to taking notes in class, studying for tests, and managing time, with only about 50 percent of the respondents reporting that they were well or very well prepared in these skills. Ratings for writing papers fell between the two groups described above, with 66 percent of the respondents reporting that they were well or very well prepared in this area.

EXHIBIT E-3

Students' Ratings of Academic Courses

	Average Rating ¹	Percentage Rating Instruction as "Good" or "Very Good"	Percentage Taking Two or More Semesters
English	3.06*	84	99
Social Studies	3.06*	85	99
Foreign Language	2.81	68	75
Mathematics	2.99	76	99
Science	3.04*	81	99

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

*Ratings significantly higher than those assigned to foreign language and mathematics.

EXHIBIT E-4

Percentage of Students Rating Vocational Courses As "Good" or "Very Good"

	Average Rating ¹	Percentage Rating Courses As "Good" or "Very Good"	Percentage of Students Taking Four or More Courses
Business Education	3.22*	88	32
Occupational Home Economics	3.05**	81	18
Cooperative Education	3.03**	85	13
Trade/Industry	3.14	82	17

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

*Statistically significantly higher than total county vocational course average.

**Statistically significantly lower than total county vocational course average.

EXHIBIT E-5

Percentage of Students Rating "Other Elective" Courses As "Good" or "Very Good"

	Average ¹ Rating	Percentage Rating "Good" or "Very Good"	Percentage Taking Two or More Courses
Art	3.16	86	37
Music	3.13	82	33
Health/P.E./ Driver Ed.	3.10	87	83

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

EXHIBIT E-6

Ratings of Specific Skill Areas

Skill Area	Percentage Feeling "Well" or "Very well" Prepared	Average ¹ Rating
Writing papers	66	2.80*
Taking notes in class	58	2.64
Using the library	70	2.80*
Completing reading assignments and homework	72	2.85*
Studying for tests	52	2.51**
Managing time	46	2.41**

1. 4.0=Very well, 3.0=Well, 2.0=Poorly, 1.0=Very poorly

*Statistically significantly higher than average county rating of overall skill preparedness.

**Statistically significantly lower than average county rating of overall skill preparedness.

RATINGS OF COUNSELORS AND OTHER HIGH SCHOOL STAFF

Students were asked to rate the help they had received from counselors and other high school staff both in resolving school-related conflicts and preparing for future work and school experiences. The responses show that the counselors received mixed ratings from the students, with the majority indicating that they had adequate access to the counselors but with less than half reporting that they felt that their counselors knew them personally and understood their individual concerns. Interestingly, counselors received the highest ratings from minority students, especially black students, who both took greater advantage of counseling services and most frequently reported that their counselors understood them (Exhibit E-7).

Ratings of the helpfulness of "other staff," such as teachers, career coordinators, etc., were generally somewhat lower, with only about 50 percent of the students giving positive ratings to the help they received (Exhibit E-8). While students reported seeking help from other staff in areas, such as job skills/training, high school courses, skills and courses needed for jobs and college, schools within and beyond a 50-mile radius of home, financial aid, and strategies for applying to schools, they were generally not very satisfied with the help they received. The areas rated the lowest were financial aid, high school courses needed for jobs/colleges, and job skills/training.

EXHIBIT E-7

Ratings of Counselors

	Asians		Blacks		Whites		Hispanics		Overall	
	M	F	M	F	M	F	M	F	M	F
Understands me*	60	53	75	60	46	46	60	48	48	46
Is accessible	91	76	88	85	84	80	83	81	84	80
Enough time	74	71	90	74	79	75	86	69	79	75
Sought Info.*	77	84	76	90	70	81	74	79	71	81

*Indicates a significant difference between students by race and sex.

EXHIBIT E-8

Percentage of Students by Race and Sex
Rating Information Received Very Helpful or Helpful

Area of Help	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Job Skills/Training*	62	53	49	73	49	56	61	63	50	57
H.S. Courses Needed for Jobs/College	75	60	68	67	59	61	67	66	60	61
School Within 50 Miles of Home*	75	60	60	64	58	62	70	72	59	62
Schools More Than 50 Miles of Home*	45	56	65	64	51	55	42	68	51	56
Financial Aid*	47	46	55	63	41	44	45	52	42	46
Need to Apply to a Variety of Schools	73	62	60	70	57	56	55	63	58	57

*Significant difference by race and sex.

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FOLLOW-UP STUDY OF HIGH SCHOOL CLASS OF 1981
ONE YEAR AFTER GRADUATION

INTRODUCTION

Since 1963, the Montgomery County Public Schools (MCPS) has conducted annual surveys of its high school graduating classes. These surveys gathered information primarily about the postsecondary institutions that graduates planned to attend and the kinds of jobs they hoped to hold. Graduates were queried at two points in time: the spring of their senior year and the following fall.

In response to questions raised by both school staff and community members regarding how well MCPS is succeeding in educating its students and what happens to students as they progress in their education and careers, survey activity was expanded substantially in the 1981-82 school year. Additional areas included covered questions regarding student perceptions of the quality of instruction, the preparation received in study and time management skills, the service provided by counselors, and helpfulness of personnel in MCPS high schools in providing information on postsecondary schools and careers as well as questions about graduates' posthigh school activities. Plans were made for gathering these data at graduation and one, three, and five years following graduation.

Using the revised format, two student surveys were piloted in the spring of 1982: a survey of graduating seniors (class of 1982), administered in four high schools, and a survey of graduates (class of 1981), administered one year after leaving the system.

The present report provides a summary of responses to the follow-up survey of graduates of the class 1981.

PURPOSE

The survey was designed to gather data on what students were doing and how they felt about their high school education one year after graduation. In addition, because of concerns raised by the Minority Relations Monitoring Committee, special attention was given to determining how students, especially minority students, perceived the education and the counseling they had received. Specific areas of investigation included:

- o Postsecondary education and employment activities during the first year after graduation

1. Information from the four-school survey of seniors of the class of 1982 has been used to construct a more precise form for use in 1983 and, where useful, was shared with principals of the schools surveyed. Because of the limited amount of data collected, however, no formal report of this pilot senior survey is planned.

- o Students' perceptions of the quality of the courses taken in high school and of their preparation in academic skill areas (note taking, writing papers, managing time, etc.), and, for those who took vocational courses, their perceptions of the quality of those courses
- o Students' perceptions of the effectiveness of counseling services and services of other high school staff, especially in such areas as preparing for future education or jobs, choosing among options for college or vocational school, and identifying sources of financial aid for further education

THE RESPONDENT SAMPLE

Surveys were mailed to all of the 8,678 June 1981 MCPS graduates in the spring of 1982, about nine months after they graduated. After two mailings, a total of 2,627 surveys or 30 percent of the initial sample were returned. This response rate, while comparable to and even higher than that of other graduate surveys, is lower than desirable. As the survey activity is repeated in future years, it will be critical to explore ways of increasing the response rate and obtaining a fuller picture of the opinions of MCPS graduates.

Respondents were grouped by race, sex, and achievement level to determine the extent to which the respondent sample reflected the composition of the students in the class of 1981 (see Exhibits 1 and 2).² Analyses indicate that responses were received from all race, sex, and achievement groups in the regular high school program (see Exhibit 3) and all high schools were represented (Exhibit 4). However, low-achieving males were slightly under-represented and white middle- and high-achieving females and high-achieving males were overrepresented in the respondent sample.³

Further, students with the highest achievement level responded most frequently (45 percent of the sample compared with 31 percent of the population), while those with low or no test scores responded least frequently (30 percent of the sample compared with 47 percent of the population). While these disproportions are not unexpected and are often found in surveys of this kind, they nonetheless place certain limitations on the generalizations which can be drawn and must be kept in mind in interpreting the findings.

2. Four achievement groups were formed: High (66-99 Normal Curve Equivalent (NCE) on the California Achievement Test, composite score in the 11th grade); average (49-65 NCE); low (1-48 NCE); and those with no test scores, a group which may consist predominantly of special students enrolled in regular high schools.

3. In future years, additional follow-up activities will be undertaken where preliminary analyses indicate that some group of students is not adequately represented. This was not done for the present study because of its pilot nature.

EXHIBIT 1

Population and Sample by Sex and Race

Race	Males		Females		Total	
	Popul. %	Sample %	Popul. %	Sample %	Popul. %	Sample %
White	41	34	42	53	83	87
Alaskan/ American Indian	0	0	0	0	0	0
Asian	2	2	2	2	4	4
Black	4	2	5	4	9	6
Hispanic	1	1	2	2	3	3
Total	49	39	51	61	99	100

EXHIBIT 2

Population and Sample by Achievement

California Achievement Test Composite Scores (11th Grade)	Population %	Sample %
No scores available	20	10
1-48 NCE*	27	20
49-65 NCE	22	25
66-99 NCE	31	45

*NCE=Normal Curve Equivalent score.

Four achievement groups were formed: High (66-99 Normal Curve Equivalent (NCE) on the California Achievement Test, composite score in the 11th grade); average (49-65 NCE); low (1-48 NCE); and those with no tests scores, a group which may consist predominantly of special students enrolled in regular high schools.

EXHIBIT 3

Total Population and Sample Proportions by Race, Sex, and Achievement

Race and Sex	No Test Scores Available				1-48 NCE 11th Grade California*				49-65 NCE 11th Grade California*				66-99 NCE 11th Grade California*				Total			
	Population		Sample		Population		Sample		Population		Sample		Population		Sample		Population		Sample	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
White Males	632	7	78	3	890	10	146	6	742	9	201	8	1301	15	478	18	3565	41	903	34
White Females	647	7	128	5	918	11	271	10	918	11	385	15	1182	14	615	23	3665	42	1399	53
Alaskan/Amer. Indian Males	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
Alaskan/Amer. Indian Females	0	0	0	0	5	0	1	0	4	0	0	0	1	0	1	0	10	0.1	2	0
Asian Males	78	1	11	0.4	41	0.5	8	0.3	20	0.2	6	0.2	54	0.6	24	0.9	193	2	49	2
Asian Females	71	1	8	0.3	35	0.4	14	0.5	36	0.4	13	0.5	53	0.6	23	0.9	195	2	58	2
Black Males	119	1	5	0.2	165	2	19	0.7	56	0.6	10	0.4	28	0.3	7	0.3	368	4	41	2
Black Females	119	1	19	0.7	205	2	54	2	45	0.5	16	0.6	36	0.4	12	0.5	405	5	101	4
Hispanic Males	48	0.6	8	0.3	33	0.4	7	0.3	25	0.3	9	0.3	17	0.2	7	0.3	123	1	31	1
Hispanic Females	53	0.6	13	0.5	50	0.6	12	0.5	30	0.3	11	0.4	15	0.2	7	0.3	148	2	43	2
Total Males	878	10	102	4	1,134	13	180	7	843	10	226	9	1,400	16	516	20	4,255	49	1,024	39
Total Females	890	10	168	6	1,213	14	352	13	1,033	12	425	16	1,287	15	658	25	4,423	51	1,603	61

*Composite score

658b

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EXHIBIT 4

Number of Surveys Mailed by School and Number and Percentage Received

School Name	Number Sent	Number Received	Percentage Received
<u>Area 1</u>			
Montgomery Blair	549	134	24
Albert Einstein	266	98	37
J. F. Kennedy	385	94	24
Northwood	353	106	30
Paint Branch	342	110	32
Sherwood	339	80	24
Springbrook	520	152	29
Wheaton	399	123	31
<u>Area 2</u>			
Bethesda-Chevy Chase	398	116	29
Churchill	590	204	35
Walter Johnson	376	124	32
Richard Montgomery	345	93	27
Peary	469	127	27
Rockville	415	117	28
Walt Whitman	572	225	39
Woodward	303	89	29
<u>Area 3</u>			
Damascus	266	91	34
Gaithersburg	417	122	29
Magruder	339	91	27
Poolesville	102	22	22
Seneca Valley	460	133	29
Wootton	474	176	37
Total	8,678	2,627	30

FINDINGS

POSTGRADUATE EDUCATIONAL AND EMPLOYMENT EXPERIENCES

The data show that the vast majority (88 percent) of graduates continued their education in postsecondary institutions, attending mainly four-year colleges and universities. However, significant differences were found when postgraduate enrollments were examined by race and sex, with blacks and Hispanic females being less likely to continue their education than students from other groups.

Those not attending school in 1981-82 were generally working, employed in business/office jobs, sales, or food/restaurant jobs. Half of this group of students planned, however, on attending school in 1982-83, and only 6 percent of the respondents had no plans for further postsecondary education. Details in these areas are presented in the sections which follow.

Students Attending School in 1981-82

- o Eighty-eight percent of those who responded had attended school during the first year after graduation, and 85 percent indicated that they planned on continuing to attend school during the 1982-83 school year. This 88 percent attendance figure is somewhat higher than the 78.7 percent reported in the "Follow-Up Study of 1980 High School Graduates" and probably reflects the fact that high-achieving students are overrepresented in the present sample.
- o Of those attending school, 75 percent attended a four-year college, 22 percent attended a two-year college, and 3 percent attended a vocational, business, or trade school. Exhibit 5 shows the types of schools attended, categorized primarily according to the system in Barron's Guide to Undergraduate Colleges (with the additional category of "Ivy League" separated from "Most Competitive Private").
- o Of the students who provided the name of the postsecondary institution they were attending, the institutions named most frequently were the University of Maryland (College Park) and Montgomery College, with each being mentioned by 20 percent of the respondents (Exhibit 6).
- o Significant differences in postsecondary school attendance were found when the data were examined by race and sex. Specifically, black males and females and Hispanic females were less likely to continue in school after graduation than were students from the other race and sex groups (Exhibit 7).
- o Differences were also found when patterns of postgraduate attendance were examined by individual senior high school (Exhibit 8). The responses indicated that the percentage of students continuing their education after high school ranged from a low of 76 percent at Wheaton to a high of 97 percent at Springbrook. Since these figures are considerably higher than those reported in past studies, it is likely that many of those who chose not to respond to the survey were those who did not go on in school.

EXHIBIT 5

Types of Schools Attended by MCPS Graduates

School Type*	Percentage of Those Responding
Ivy League (e.g., Cornell, Yale, Princeton, University of Pennsylvania)	4
Most Competitive Private (e.g., MIT, University of Chicago, Johns Hopkins, Carnegie Mellon)	3
Highly Competitive Private (e.g., Duke, Georgetown, Brandeis, Rochester, Oberlin, Vanderbilt)	8
Most and Highly Competitive Public (e.g., University of Michigan, University of Virginia, Military Academies)	3
Very Competitive Private (e.g., Syracuse, Boston University, American University, George Washington University)	12
Very Competitive Public (e.g., Penn State, Virginia Polytechnic Institute, University of Pittsburgh)	4
Competitive Public and Private (e.g., University of Maryland, University of Delaware, James Madison University)	39
Less Competitive, Noncompetitive, and Not Rated Public and Private (e.g., Howard, Salisbury State, St. Mary's College, West Virginia University)	3
Trade, Vocational, Arts Schools (e.g., Washington School for Secretaries (WSS), Sterling Institute, Washington Business School, Capitol Institute of Technology)	3
Junior/Community Colleges (e.g., Montgomery College)	21
TOTAL	100

*Categories taken from Barron's Guide to Undergraduate Colleges (1982) with the subgroup "Ivy League" separated from other "Most Competitive Private" schools.

EXHIBIT 6

Schools Most Frequently Attended by Graduates of the Class of 1981

School Name	No.	%
1. University of Maryland (College Park, Baltimore, Eastern Shore, Frostberg, Salisbury, Towson)	502	24.2
2. Montgomery College (Rockville, Takoma Park, Germantown)	409	19.7
3. Duke	38	1.8
4. James Madison	31	1.5
5. VPI	26	1.3
6. University of Michigan	24	1.2
Shepherd	24	1.2
7. University of Delaware	22	1.1
8. Penn State	20	1.0
Syracuse	20	1.0
Catholic University	20	1.0
George Washington	20	1.0
9. Boston University	16	0.8
Georgetown	16	0.8
University of Virginia	16	0.8
10. University of Pennsylvania	15	0.7
Western Maryland	15	0.7
Cornell	14	0.7
Loyola	14	0.7
St. Mary's College	14	0.7

EXHIBIT 7

Percentage of Sample Students by Sex and Race Attending School in 1981-82

	Males	Females	Total
White	87	88	88
Asian	92	95	93
Black	77*	78*	77*
Hispanic	90	81*	85
Total	87	88	88

*Proportion attending school significantly lower than other sex by racial groups.

EXHIBIT 8

Percentage of Students Attending Postsecondary School
in 1981-82 by High School

High School	Percentage* of Respondents by School
<u>Area 1</u>	
Montgomery Blair	86
Albert Einstein	87
J. F. Kennedy	90
Northwood	92
Faint Branch	84
Sherwood	82
Springbrook	97
Wheaton	76
<u>Area 2</u>	
Bethesda-Chevy Chase	95
Churchill	94
Walter Johnson	92
Richard Montgomery	84
Peary	86
Rockville	84
Walt Whitman	94
Woodward	93
<u>Area 3</u>	
Damascus	78
Gaithersburg	78
Magruder	89
Poolesville	77
Seneca Valley	83
Wootton	96
Total	88

*Percentages computed by dividing number of students by
total number in that school who returned their surveys.

- o In addition, analyses showed that there was a tendency for students in the Bethesda/Potomac area to attend the more elite or prestigious colleges and universities, while others more often attended junior colleges and four-year colleges in the other categories (Exhibit 9).

Students Not Attending School in 1981-82

- o Twelve percent of the respondents indicated that they did not attend postsecondary schools during the 1981-82 school year, although half planned to do so in the future.
- o Most of these graduates who did not attend school (88 percent) were employed at least part of the year since graduation, and 84 percent were employed at the time of the survey. Full-time work occupied about 71 percent of those employed, generally in business or offices (29 percent), sales (13 percent) or food/restaurant work (10 percent).
- o Their average hourly wage ranged between \$4 and \$5.
- o Significantly more females, particularly black females, and significantly fewer white males were included in this group (Exhibit 10). Further, this group was also characterized by a disproportionately large number of students who were low achievers or who had no test scores (Exhibit 11).

STUDENTS' RATINGS OF COURSES OFFERED IN HIGH SCHOOL

Students were asked to rate the quality of instruction provided in academic and vocational courses and other electives (art, music, and P.E.), using a 1 to 4 scale, with 1 being "very poor" and 4 being "very good." They were instructed to provide such ratings only for academic and other elective courses in which they had taken at least two semesters of instruction and only for vocational courses in which they had taken four semesters of instruction. Two scores were computed: average rating and percentage of students giving a "good" or "very good" rating (a 3 or 4).

Overall, the responses show that with the exception of foreign languages and mathematics, the courses were rated as "good" or "very good" by over 80 percent of the students responding; and on the average, courses were given a "good" rating. However, significant differences in ratings were found among schools and groups of students. Further, despite these favorable ratings, it was clear that at least some students saw room for improvement in the major subject areas. Details are presented below.

Academic Subjects

- o Virtually all respondents indicated that they had taken two or more semesters of courses in English, social studies, mathematics, and science. In contrast, only 75 percent of the respondents reported taking two or more semesters of courses in foreign languages. No statistically significant differences were found when the data were examined by race and sex (Exhibit 12).

EXHIBIT 9

Types of Colleges and Trade Schools Attended by Graduates of Each MCPS High School

High School	Ivy League	Most Comp. Private	Highly Comp. Private	Most/Highly Comp. Public	Very Comp. Private	Very Comp. Public	Comp. Public & Private	Less Comp., Non-Comp., Not Rated	Vocational, Business, Trade, Arts	Junior/Community Colleges
Area 1										
Montgomery Blair	0*	2	5	2	3	3	49	4	4	27
Einstein	0	1	5	0	9	3	39	3	10	31
Kennedy	5	3	4	3	16	3	42	4	5	16
Northwood	3	1	2	1	6	2	53	2	4	25
Paint Branch	0	1	6	2	9	3	51	2	1	23
Sherwood	1	10	1	0	9	4	35	7	3	29
Springbrook	7	1	3	2	11	9	46	2	3	15
Wheaton	1	1	1	3	5	3	43	5	8	31
Area 2										
Bethesda-Chevy Chase	10	11	18	3	13	2	25	4	3	12
Churchill	3	0	14	6	13	6	44	2	1	10
Walter Johnson	4	7	11	1	16	2	36	4	1	17
Richard Montgomery	3	1	6	3	13	1	37	4	6	25
Peary	0	3	10	1	10	2	38	0	5	32
Rockville	7	2	8	1	15	7	33	1	3	23
Walt Whitman	12	8	11	8	23	2	28	2	1	6
Woodward	3	8	20	5	12	4	34	0	1	13
Area 3										
Damascus	2	0	6	2	5	6	31	2	8	40
Gaithersburg	3	0	7	1	13	5	37	3	0	32
Magruder	0	0	8	0	17	9	30	3	3	30
Poolesville	0	0	6	0	0	0	53	0	12	29
Seneca Valley	2	0	2	3	11	7	35	3	4	31
Wootton	4	5	6	1	13	9	49	3	0	11

*Numbers are percentages of students in each school.

EXHIBIT 10

Sex and Race of Students Not Attending School in 1981-82

Race	Percentage of Group Not Attending School		Percentage in Sample	
	Males	Females	Males	Females
White	31	53	34	53
Asian	1	1	2	2
Black	3	7	2	4
Hispanic	1	3	1	2
Total	36	64	39	61
Number in Group	110	196	1,024	1,603

EXHIBIT 11

Achievement Level of Students Not Attending School in 1981-82

California Achievement Test 11th Grade Composite	Percentage of Group Not Attending School	Percentage In Total Sample
No Score Available	26	10
1-48 NCE*	47	20
49-65 NCE	15	25
66-99 NCE	11	45
Total	99	100
Number in Group	306	2,627

*NCE=Normal Curve Equivalent score.

Four achievement groups were formed: High (66-99 Normal Curve Equivalent (NCE) on the California Achievement Test, composite score in the 11th grade); average (49-65 NCE); low (1-48 NCE); and those with no tests scores, a group which may consist predominantly of special students enrolled in regular high schools.

EXHIBIT 12

Percentage of Students by Sex and Race Enrolling* in Various Academic Courses

	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
English	96	100	98	99	98	98	97	98	98	98
Social Studies	98	98	95	99	96	97	100	95	96	97
Foreign Language	71	86	54	67	66	80	74	79	66	79
Mathematics	100	100	93	97	96	98	97	98	96	98
Science	98	97	85	94	96	96	100	81	96	95

*Enrollment based on students who took two or more semesters of courses.

- o English, social studies, and science were rated as "good" or "very good" by over 80 percent of the respondents. Significantly lower ratings were given to mathematics and foreign languages, however, with mathematics being rated as "good" or "very good" by 76 percent of the respondents and foreign languages receiving a rating of good or very good from 68 percent of the respondents (Exhibit 13). A similar pattern of ratings was found where the average rating was examined.
- o Differences in ratings by race and sex of student were also found (Exhibits 14a and 14b). For example, males rated mathematics instruction significantly higher than females (79 percent vs 75 percent), although males and females took equal amounts of mathematics courses.⁴ Asian students gave mathematics significantly higher ratings than other groups of students, with 88 percent of the Asian females and 98 percent of the Asian males rating it as good or very good. Hispanic males and white females, in contrast, provided the lowest ratings (67 percent and 74 percent respectively, rating mathematics "good" or "very good").
- o Differences were also found when ratings were examined by individual school, with students often offering the most favorable ratings to schools not typically cited as the highest achieving in MCPS. Most schools, however, were found to have both strengths and weaknesses, and the pattern depended on the particular department rated.⁵
- o The area mentioned as most in need of improvement was English, cited by 22 percent of the respondents. Mathematics was cited next most frequently with 15 percent of the students indicating that it was in need of improvement (Exhibit 15).

4. Amount of mathematics taken was restricted to two or more semesters in high school.

5. Ratings by individually identified school are not being presented for this pilot survey but will be in future years.

EXHIBIT 13

Students' Ratings of Academic Courses

	Average ₁ Rating	Percentage Rating Instruction as "Good" or "Very Good"	Percentage Taking Two or More Semesters
English	3.06*	84	99
Social Studies	3.06*	85	99
Foreign Language	2.81	68	75
Mathematics	2.99	76	99
Science	3.04*	81	99

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

*Ratings significantly higher than those assigned to foreign language and mathematics.

EXHIBIT 14a

Percentage of Students Rating Academic Courses as
"Good" or "Very Good" by Race and Sex

	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
English	87	78	88	91	82	84	77	95	83	84
Social Studies	79	82	82	87	86	85	87	78	86	85
Foreign Language	77	74	59	78	66	68	52	79	66	69
Mathematics*	98	86	82	77	78	74	67	79	79	75
Science	94	79	83	85	83	81	68	80	83	81

EXHIBIT 14b

Average Ratings¹ of Academic Courses by Race and Sex

	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
English*	3.15+	3.00-	3.08	3.21+	2.98-	3.10+	3.00-	3.26+	2.99-	3.11+
Social Studies	2.98-	2.96-	2.97-	3.04	3.08	3.06	3.16+	3.02-	3.07	3.06
Foreign Language*	2.91+	2.92+	2.59-	3.07+	2.76-	2.82	2.61-	3.18+	2.76-	2.84
Mathematics*	3.43+	3.24+	3.00	3.05+	3.04+	2.93-	2.67-	3.00	3.05+	2.95-
Science	3.42+	3.14+	3.06	3.02	3.07	3.01	2.74-	3.17+	3.07	3.02
Total Academics	3.19+	3.05+	2.96-	3.08+	3.00	2.99	2.85-	3.12+	3.00	3.00

*Differences significant by race and sex

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

Pluses (+) and minuses (-) signify two or more standard errors from the total county mean; standard error=.014 for English, social studies, and science; .02 for foreign language, and .016 for math. (+) and (-) for total academic score based on a standard error of .02. Using a standard error of .02, total county averages for English, social studies, and science are significantly higher than those for math and foreign language.

EXHIBIT 15

Percentage of Students Indicating That Courses Were "In Need of Improvement"

Course	Percentage
English	22
Social Studies	7
Foreign Language	9
Mathematics	15
Science	8

Vocational Courses

Vocational courses were divided into four groups: Business Education, Occupational Home Economics, Cooperative Education, and Trade and Industrial Courses. The data show the following:

- o Enrollment rates differed widely among the four areas, from a low of 13 percent in Cooperative Education to a high of 32 percent in Business Education. Exhibits 16 and 17 present more detailed findings in this area.
- o Overall, these courses were rated as "good" or "very good" by over 80 percent of the students responding. A similar pattern of ratings was found when overall average rating was considered.
- o For each of the subject areas, differences in ratings were found by race and sex (Exhibits 18a and 18b).
- o Differences were also found when ratings were examined by individual school and departments within schools.

Art, Music, and Health/Physical Education/Driver Education

- o Differences in participation rates varied considerably with 37 percent of the respondents reporting two or more semesters of art, 33 percent reporting two or more semesters of music, and 83 percent of the respondents reporting two or more semesters of health, physical education, or driver education (Exhibit 19). For art and music, differences in participation rates were also found by race and sex (Exhibit 20).
- o Overall, courses in art, music, and health/physical education/driver education were rated as good or very good by over 80 percent of the students taking two or more semesters (Exhibit 19).
- o Significant differences in ratings of courses were found for art and music when the data were examined by race and sex (Exhibits 21a and 21b).

EXHIBIT 16

Percentage of Students Rating Vocational Courses As "Good" or "Very Good"

	Average ¹ Rating	Percentage Rating Courses As "Good" or "Very Good"	Percentage of Students Taking Four or More Courses
Business Education	3.22*	88	32
Occupational Home Economics	3.05**	81	18
Cooperative Education	3.03**	85	13
Trade/Industry	3.14	82	17

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

*Statistically significantly higher than total county vocational course average.

**Statistically significantly lower than total county vocational course average.

EXHIBIT 17

Percentage of Students by Sex and Race Enrolling* in Vocational Courses

	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Business/Office	31	40	49	51	24	35	32	37	25	37
Occupational Home Economics	4	24	22	43	8	22	19	21	9	24
Cooperative Educ.	12	17	27	29	10	13	23	23	12	14
Trade/Industrial	33	17	37	22	29	8	29	19	30	9

*Enrollment based on students who took four or more semesters of courses.

EXHIBIT 18a

Percentage of Students by Sex and Race Rating Vocational Courses "Good" or "Very Good"¹

Vocational Area	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Business Education*	100	96	90	94	79	90	80	94	81	91
Occupational Home Economics*	0 ²	79	78	86	62	86	50 ³	78	61	86
Cooperative Educ.*	100	60	91	90	76	91	71	80	78	89
Trade/Industry*	100	70	87	68	84	79	56	63	84	76

EXHIBIT 18b

Average Ratings¹ of Vocational Courses by Sex and Race

Vocational Area	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Business Education*	3.13-	3.35+	3.30+	3.41+	2.95-	3.32+	2.90-	3.38+	2.98-	3.33-
Occupational Home Economics*	2.00- ²	2.92-	2.89-	3.09	2.67-	3.17+	2.50- ³	3.00	2.67-	3.15+
Cooperative Educ.*	3.00	2.70-	3.00	3.07	2.88-	3.14+	2.71-	3.10	2.89-	3.11+
Trade/Industry*	3.25+	2.80-	3.33+	2.68-	3.20	3.12	2.78-	2.87-	3.20	3.02-
Total Vocational	2.90-	3.02-	3.16	3.13	2.93-	3.21+	2.76-	3.15	2.94-	3.19

*Differences in percentages statistically significant among sex by race groups for all areas

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

(+) and (-) based on standard errors of .024 for Business Education, .036 for Occupational Home Economics, .037 for Cooperative Education, and .039 for Trade/Industry.

2. Percentage based on only two students

3. Percentage based on only six students

EXHIBIT 19

Percentage of Students Rating "Other Elective" Courses As "Good" or "Very Good"

	Average ¹ Rating	Percentage Rating "Good" or "Very Good"	Percentage Taking Two or More Courses
Art	3.16	86	37
Music	3.13	82	33
Health/P.E./ Driver Ed.	3.10	87	83

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

EXHIBIT 20

Percentage of Students by Race and Sex Enrolling in "Other Elective" Courses

	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Art*	41	53	32	47	29	40	58	51	31	41
Music*	29	40	24	48	34	32	32	26	33	33
Health/P.E./ Driver Ed.	80	81	89	89	81	83	84	86	81	83

*Statistically significant difference for students by sex and race.

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EXHIBIT 21a

Ratings of Other Elective Courses

Percentage of Students Rating "Other Elective" Courses
As "Good" or "Very Good" by Race and Sex

	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Art*	80	94	92	87	81	88	72	86	81	88
Music*	93	87	90	77	74	88	70	91	75	87
Health/P.E./ Driver Ed.	85	98	94	89	86	87	85	84	86	87

*Statistically significant differences found by race and sex.

EXHIBIT 21b

Average Ratings of "Other Elective" Courses

	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Art*	2.95-	3.29+	3.23+	3.17	3.05-	3.22+	2.89-	3.27+	3.04-	3.22+
Music*	3.14	3.30+	3.30+	3.12	3.00-	3.21+	2.70-	3.27+	3.01-	3.21+
Health/P.E./ Driver Ed.	3.10	3.17+	3.56+	3.27+	3.07-	3.08	3.23+	3.19+	3.10	3.09
Total Electives	3.07-	3.23+	3.41+	3.21+	3.05-	3.15	3.01-	3.23+	3.06-	3.15

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

*Statistically significant differences found by race and sex.

(+) and (-) based on standard errors of .024 for art, .028 for music, and .015 for health/physical education/driver education.

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- o Differences in ratings for art, music, and health/physical education/driver education were found when ratings were examined by individual school.

RATINGS OF PREPARATION IN STUDY AND TIME MANAGEMENT SKILLS

In addition to rating instruction in specific content areas, students were also asked to rate how well prepared they were in what might be called "study and time management skills." Specifically, they were asked to rate their preparation in:

- o Writing papers
- o Taking notes in class
- o Using the library
- o Completing reading assignments and homework
- o Studying for tests
- o Managing time

Exhibit 22 presents the overall responses of the group to this question. The data show that the respondents generally felt less well prepared in these skill areas than in the content subjects. Specifically:

- o Despite the fact that respondents rated instruction in English highly, only 66 percent felt well or very well prepared for writing papers.
- o Students felt the best prepared for completing reading assignments and homework and using the library, with approximately 70 percent of the respondents indicating they were well or very well prepared in these areas.
- o The lowest ratings were given to taking notes in class, studying for tests, and managing time, with only about 50 percent of the respondents reporting that they were well or very well prepared in these skills.
- o Difference in rating were also found when the data were examined by race, sex, and high school attended (Exhibits 23 and 24).

OVERALL SATISFACTION WITH HIGH SCHOOL EDUCATION

Overall, students expressed satisfaction with their high school education. Seventy-four percent of the respondents indicated that they were satisfied with the program that they received, although 63 percent of the respondents indicated that they found their high school program somewhat or very easy. No significant differences by race, sex, or senior high school attended were found.

Nonetheless, 39 percent said that they would make changes in their course of study, if they had it to do over. They indicated that they would take more math, science, foreign languages, business, and advanced placement classes. Responses to this question differed significantly by race. About 50 percent of the black and Asian students said they would change their program. White and Hispanic students were significantly less likely to indicate that they would do so (38 percent and 40 percent, respectively).

EXHIBIT 22

Ratings of Specific Skill Areas

Skill Area	Percentage Feeling "Well" or "Very well" Prepared	Average ₁ Rating
Writing papers	66	2.80*
Taking notes in class	58	2.64
Using the library	70	2.80*
Completing reading assignments and homework	72	2.85*
Studying for tests	52	2.51**
Managing time	46	2.41**

1. 4.0=Very well, 3.0=Well, 2.0=Poorly, 1.0 =Very poorly

*Statistically significantly higher than average county rating of overall skill preparedness.

**Statistically significantly lower than average county rating of overall skill preparedness.

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EXHIBIT 23

Percentage of Students by Race and Sex
Feeling Very Well or Well Prepared in Specific Skill Areas

Skill Area	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Writing papers	80	64	63	70	63	67	54	74	64	67
Taking notes in class	58	65	37	65	55	60	57	60	55	60
Using the library	76	70	83	76	72	68	71	71	73	68
Completing reading assignments and homework*	82	85	63	85	66	75	63	80	67	76
Studying for tests	64	60	43	58	51	50	48	71	52	52
Managing time*	44	56	23	43	42	48	41	63	41	48

*Statistically significant differences found between the eight sex-by-race groups for this skill.

EXHIBIT 24

Average Skill Preparedness by Sex and Race¹

Skill Area	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Writing Papers*	3.00+	2.73-	2.67-	2.84+	2.73-	2.85+	2.64-	2.80	2.74-	2.84+
Taking Notes*	2.60-	2.82+	2.33-	2.78+	2.57-	2.69+	2.43-	2.66	2.56-	2.70+
Using the Library	2.93+	2.83	2.90+	2.97+	2.82	2.76-	2.79	2.86+	2.83	2.78
Homework*	2.97+	3.09+	2.77-	3.04+	2.72-	2.90+	2.78-	3.06+	2.74-	2.92+
Studying for Tests	2.71+	2.78+	2.40-	2.55+	2.52	2.48	2.41-	2.86+	2.52	2.50
Managing Time*	2.38	2.64+	2.03-	2.42	2.36-	2.44	2.30-	2.69+	2.34-	2.45+
Total	2.77+	2.82+	2.52-	2.77+	2.52-	2.67	2.56-	2.82+	2.62-	2.70

1. 4.0=Very good, 3.0=Good, 2.0=Poor, 1.0=Very poor

*Statistically significant difference by sex and race.

(+) and (-) based on standard errors of .018 for writing papers, taking notes, studying for tests, and managing time; and .016 for using the library and preparing for homework and reading assignments.

RATINGS OF COUNSELORS AND OTHER HIGH SCHOOL STAFF

Students were asked to rate the help they had received from counselors and other high school staff both in resolving school-related conflicts and preparing for future work and school experiences. The responses show that counselors and staff received mixed ratings from the students, and areas for improvement were clearly indicated.

Counselors

Students were asked to rate the counseling services they had received from three perspectives: the frequency of visits to the counselor, the adequacy of the time allotted for counseling, and the degree to which the counselors knew them personally and understood their individual concerns. The data show the following:

- o Counselors were visited by 77 percent of the respondents an average of four or five times in the last two years of high school. Frequency of visits to counselors differed, however, by race and sex. Overall, minority students reported visiting counselors two or three times more often than did white students in the last two years of high school. Females sought counseling more often than males, with 81 percent vs. 71 percent reporting that they had visited the counselor four or five times during the last two years. Black and Asian females had the highest proportion of all groups using counseling services (90 percent and 84 percent, respectively).
- o Eighty-two percent of the students reported they could see a counselor when necessary, and 76 percent said there was sufficient time to deal with their questions. Some differences were found, however, as function of the sex of the respondent. Male students perceived the counselors as more accessible and more able to devote adequate time to discussion than female students (84 percent of the males compared with 80 percent of the females saw the counselor as available when needed, and 79 percent of the males compared with 75 percent of the females reported that there was sufficient time to deal with their questions). No significant differences related to race were found (Exhibit 25).

EXHIBIT 25

Ratings of Counselors

	Asians		Blacks		Whites		Hispanics		Overall	
	M	F	M	F	M	F	M	F	M	F
Understands me*	60	53	75	60	46	46	60	48	48	46
Is accessible	91	76	88	85	84	80	83	81	84	80
Enough time	74	71	90	74	79	75	86	69	79	75
Sought Info.*	77	84	76	90	70	81	74	79	71	81

- o Slightly less than half the students (47 percent) felt that their counselor knew them personally and understood their individual concerns. Minority students gave counselors a significantly more favorable rating in this area (counselors were rated as understanding by 75 percent of the black males and 60 percent of the Asian and Hispanic males and black females), while white students rated the counselors least favorably with only 46 percent giving positive ratings.

High School Staff as a Whole

Students were asked to provide ratings of the helpfulness of other staff, such as teachers, career coordinators, etc., in providing information in a variety of areas. These were:

- o Job skills/training
- o High school courses needed for jobs or college
- o Schools within 50 miles of home
- o Schools more than 50 miles from home
- o Financial aid
- o Need to apply to a variety of schools

Exhibits 26 and 27 present data on the degree to which students sought help in these areas, and their ratings of the help received, both for the sample as a whole and by race and sex.

- o Overall, the data show that the majority of students sought help from staff in each of these areas, but only about 50 percent of the students gave positive ratings to the help they received. In almost every area there is a discrepancy of 20 points or more between the percentage of students saying they sought help from staff and the percentage reporting that the information received was helpful or very helpful. The largest gaps were found in the areas of financial aid, high school courses needed for jobs/colleges, and job skills/training.
- o Staff received the highest ratings, with 62 percent saying the information was helpful or very helpful in providing information regarding schools within 50 miles of home. This is also the area in which students were least likely to seek information.
- o Differences in ratings by race and sex were also found. White and Hispanic students sought help the least often and were the most negative about the help they received. Asian males were the most positive (see Exhibit 28 for overall ratings by sex and race).
- o Significant differences in ratings by individual school were also found. However, as with the other areas examined, schools had both strengths and weaknesses in each of the areas assessed.

EXHIBIT 26

Percentage of Students by Race and Sex
Who Needed Help From Staff

Area of Help	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Job Skills/Training	85	93	88	88	75	82	77	78	76	83
H.S. Courses Needed for Jobs/College	92	96	93	95	86	88	87	86	87	89
School Within 50 Miles of Home	73	80	77	80	62	65	67	67	63	67
Schools More Than 50 Miles of Home	71	71	84	84	68	71	70	63	69	72
Financial Aid	83	98	88	90	70	71	60	61	71	74
Need to Apply to a Variety of Schools	78	90	85	87	77	78	73	72	77	79

EXHIBIT 27

Percentage of Students by Race and Sex
Rating Information Received "Very Helpful" or "Helpful"

Area of Help	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Job Skills/Training*	62	53	49	73	49	56	61	63	50	57
H.S. Courses Needed for Jobs/College	75	60	68	67	59	61	67	66	60	61
School Within 50 Miles of Home*	75	60	60	64	58	62	70	72	59	62
Schools More Than 50 Miles of Home*	45	56	65	64	51	55	42	68	51	56
Financial Aid*	47	46	55	63	41	44	45	52	42	46
Need to Apply to a Variety of Schools	73	62	60	70	57	56	55	63	58	57

*Significant difference by race and sex.

EXHIBIT 28

Average Rating¹ of Helpfulness of Staff by Sex and Race

Area of Help	Asian		Black		White		Hispanic		Overall	
	M	F	M	F	M	F	M	F	M	F
Job Skills Needed*	2.74+	2.64+	2.63	2.93+	2.50-	2.62	2.52-	2.72+	2.52-	2.64+
High School Courses Needed	2.91+	2.75+	2.86+	2.75+	2.61-	2.69	2.63-	2.81+	2.64	2.70
Schools Within 50 Miles of Home*	2.94+	2.69	2.80+	2.70	2.59-	2.70	2.70	3.00+	2.62-	2.71
Schools Outside 50 Miles of Home	2.26-	2.51	2.81+	2.71+	2.46-	2.57	2.32-	2.80+	2.47-	2.58
Financial Aid*	2.45+	2.33	2.46+	2.72+	2.23-	2.33	2.17-	2.57+	2.25-	2.36
Apply to a Large Number of Schools	2.81+	2.69+	2.70+	2.72+	2.56	2.56	2.27-	2.79+	2.57	2.59
Total	2.69+	2.60	2.71+	2.76+	2.49-	2.58	2.44-	2.78+	2.51-	2.60

1. 4.0=Very helpful, 3.0=Helpful, 2.0=Of little help, 1.0=Not at all helpful

*Statistically significant difference by sex and race.

(+) and (-) based on standard errors of .019 for skills and training needed, .018 for high school courses needed for college, .023 for schools within 50 miles of home, .022 for schools outside 50 miles from home, .023 for financial aid, and .022 for applying to a range of schools.

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